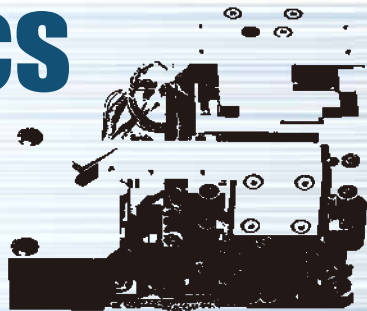


# Specs



## Specifications

Nanomanipulation stage

Dimensions: 64mm (W) x55mm (D) x62mm (H)

Weight: 550g

Travels: Coarse 15mm (X), 15mm (Y), 10mm (Z)

Fine:1.0 $\mu$ m (X/Y/Z)

Resolutions:

Coarse motion 10nm (closed loop), 500nm (open loop)

Fine motion < 1nm

Customization possible to construct special configurations

## Lineup

### Model NMS110LE

Configuration:NMS (one unit or more ), Control box (one set), Control PC

Notes:Owing to the closed loop control using a linear encoder in each axis of motion, coarse positioning with a resolution better than 10 nm is possible in the full range of travel for every axis.

Multiple units of NMS can be controlled by special software, which is useful for 10 nm positioning and repetitive operation of motion

### Model NMS110S

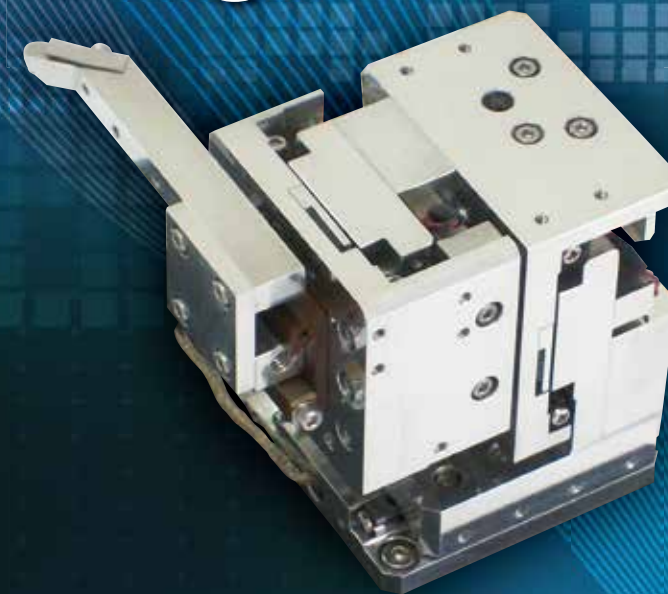
Configuration:NMS (one unit), Control box (one set)

Notes: A simple and low-cost configuration without linear encoders. XYZ axes of motion can be controlled by single control box. Nanospace operation becomes possible at relatively low cost.

The appearance and specifications of the product are subject to change without notice.

SUNYOU

# Nano Manipulation Stage



SUNYOU

URL <http://www.sunyou-ss.co.jp>

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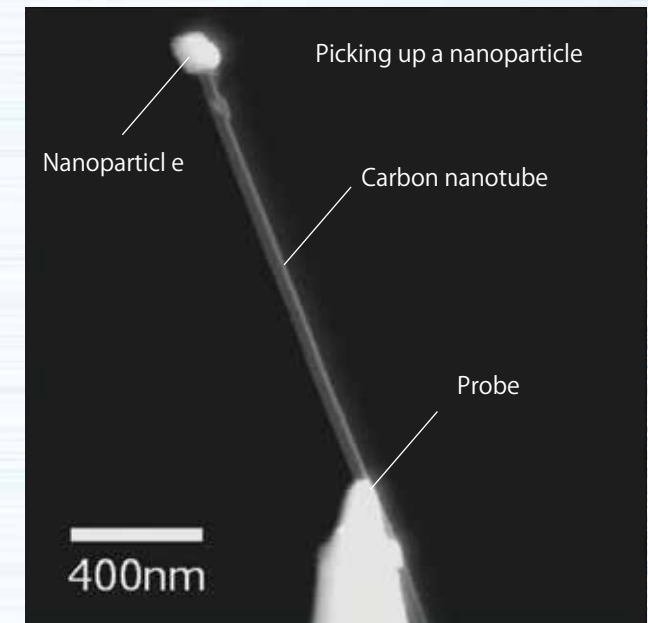
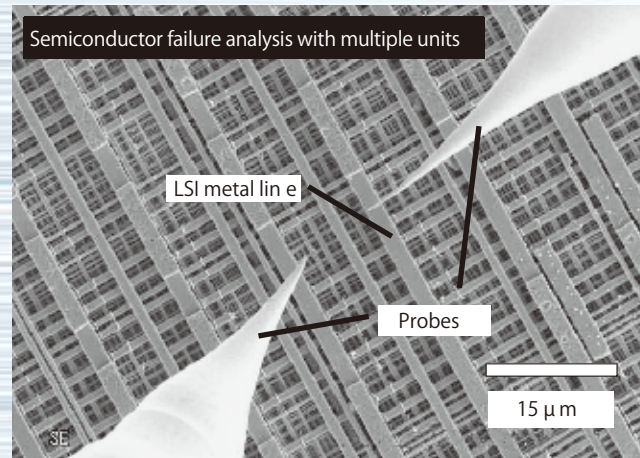
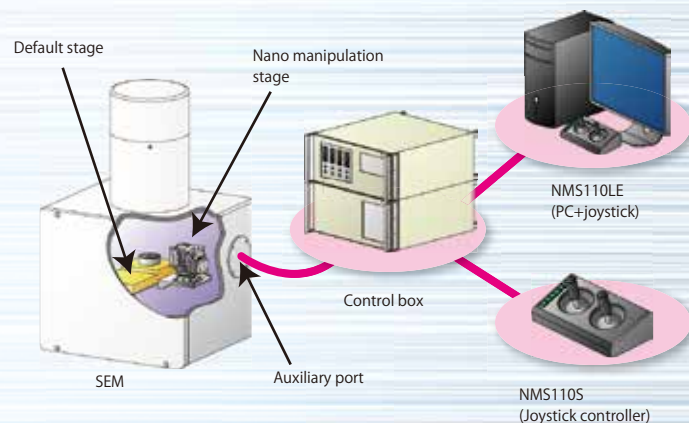
# Nanometers at your hand !

## Resolution < 1nm

Spatial resolution of the Nano manipulation stage exceeds 1 nm, which provides sufficient performance for ultrafine handling under SEMs.

## Versatility and variations

By implementing a number of stages, it is possible to construct a manipulation system of desired axes of motion. We can customize the stages according to users' needs and requests.



## SPPA, a single coarse and fine actuator developed by ourselves, realizes backlash-free positioning

Nano manipulation stage is a compact XYZ stage unit, which can be easily installed on the default stage of commercial SEMs. A variety of nano-scale operations such as the measurement of electric properties and sample handling become possible.

SPPA (Super Precision Piezo Actuator) is a novel actuator, which realizes stepwise (coarse) and piezoelectric (fine) motions with a single piezoelectric device.

